

Notice of Allowability

Application No.

09/896,136

Examiner

Dwin M Craig

Applicant(s)

LIM ET AL.

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/21/2005.
2. ☒ The allowed claim(s) is/are 1-32.
3. ☒ The drawings filed on 1-16-2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>3/24/2005</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION
AND
REASONS FOR ALLOWANCE

1. **Claims 1-32** are allowed.
2. **Claims 33-50** are cancelled.
3. Regarding the Applicant's amendment to the abstract.

The Examiner thanks the Applicant's for amending the abstract and withdraws the objection.

4. Regarding the Applicant's amendment to the specification to remedy the improper incorporation by reference of the patent publication numbers and the issued patent numbers.

The Examiner thanks the Applicant for amending the specification and withdraws the objection to the specification.

5. Regarding the Applicant's response to the 35 U.S.C. 101 Utility rejections.

The Examiner thanks the Applicant for amending the current claim language and withdraws the 35 U.S.C. 101 rejections regarding non-statutory subject matter.

6. Regarding the Applicant's response to the 35 U.S.C. 112 second paragraph rejections of claims 2, 3 and 11.

The Examiner has found Applicant arguments to be persuasive and withdraws the 35 U.S.C. 112 rejections of claims 2, 3 and 11.

Reasons for Allowance

7. The following is an examiner's statement of reasons for allowance: The following limitations in combination with other limitations are not anticipated or made obvious by the prior

Art Unit: 2123

art. (using independent claim 19 as an example), “defining a surface bounding said second system; identifying a subset of the plurality of n -dimensional simplices of said first mesh that are intersected by said surface; and” in combination with “modifying the identified subset of the plurality of n -dimensional simplices to adapt said second mesh such that it comprises said second mesh and a third mesh” The following is noted by the Examiner, Applicant has argued in the 1/21/2005 response that (page 15 of 16) “As such, “impose a fine scale unstructured grid” does not inherently require selecting a region and identifying and breaking mesh segments.” The Examiner notes that Applicant’s claim language requires that when Applicant’s mesh is adapting to another mesh it is required that one of the plurality of mesh triangles be broken. The Examiner notes that in **U.S. Patent 6,366,279 Gorman** is disclosed the teaching of breaking triangle mesh elements, (**Col. 3 lines 45-64**) “The cycles of the dual graph 208 are then broken, as shown in Fig. 2c.” The Examiner notes that in **U.S. Patent 6,018,497 Gunasekera** is disclosed triangle mesh elements (**Figure 20**), and a first mesh and a second mesh and a third mesh (**Figure 23**), however, the Examiner has found no motivation to combine the teachings of the cited references as they are not directed towards solving the same problem. Therefore, Applicant’s arguments, in combination with the instant amendments to the claims have made the presented claims neither anticipated nor obvious over the art.

7.1 Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

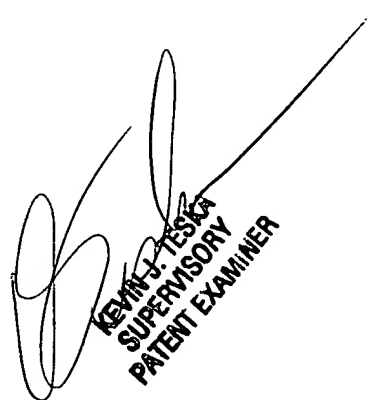
8. **Claims 1-32** are allowed. **Claims 33-50** are cancelled.

8.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on (571)272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC



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